



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/780,726

02/19/2004

Naohisa Motomura

2004\_0237A

3290

513 7590 10/30/2007  
WENDEROTH, LIND & PONACK, L.L.P.  
2033 K STREET N. W.  
SUITE 800  
WASHINGTON, DC 20006-1021

EXAMINER

NGO, NGUYEN HOANG

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

10/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/780,726

Applicant(s)

MOTOMURA, NAOHISA

Examiner

Nguyen Ngo

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7 and 9 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2616

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 1-5, 7, and 9 in the reply filed on 8/13/2007 is acknowledged.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first extracting unit, second extracting unit, information list generating subunit, comparing subunit, and filter condition setting subunit must be shown or the feature(s) canceled from the claim(s).

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Art Unit: 2616

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 9 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

**Claim 9**, claims the non-statutory subject matter of a program. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1754 (claim to a data structure per se held nonstatutory). Therefore, since the claimed programs are not tangibly embodied in a physical medium, encoded on a computer-readable medium and clearly recited as a computer program then the Applicants has not complied with 35 U.S.C 101.

Art Unit: 2616

Examiner suggests using such phrases as "A computer readable medium embedded with a computer executable program including instructions for".

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 2, 3, 7, 9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Zollinger et al. (US 6321236), in view of Cartwright et al. (US 6438171), hereinafter referred to as Zollinger and Cartwright.

**Regarding claim 1, 7, 9**, Zollinger discloses a digital broadcast receiving apparatus (client devices, abstract) that receives a transport stream onto which video data and/or audio data are multiplexed and outputs video data and/or audio data (col5 lines 65- 68), comprising:

Art Unit: 2616

a storing unit operable to store therein the tables (client copy of database table, col5 lines 40-55 and col8 lines 50-60);

information table that is repeatedly multiplexed onto the transport stream and includes  
(i) a piece of table ID information and a table version number of each of the tables and  
(ii) an information table version number of the information table, which is to be updated when there is a change in any one of the pieces of table ID information and the table version numbers (current version numbers from the server for updating the client copies of each database contained thereon and that these instructions will be of the appropriate format for the native database engine type found on the client, col13 lines 50-56),

a controlling unit (client engine, col4 line65-col5 line3) operable to analyze the extracting information table, have the first extracting unit extract, based on table ID information, such a table whose table version number has been updated, and have the storing unit update what is stored therein (apply the difference updates and/or copy of new tables from the server in order to make each database table current at the client, col13 lines 57-67 and col5 lines 20-27 and col8 lines 48-60 and col9 lines 5-12), wherein the controlling unit includes:

an information list generating subunit operable to generate an information list that includes such information of the tables stored in the storing unit that corresponds to the information table (stored information and the list of databases tables authorized for update and the version number for each authorized database table, col7 lines 22-32 and col8 lines 19-28 and col3 lines 7-15);

a comparing subunit operable to compare table version numbers written in the information list with the table version numbers in the information table extracted by the second extracting unit (col13 lines 1-16 and col8 lines 40-48); and

a filter condition setting subunit operable to set a packet identifier and a table identifier (updating information) of such a table whose table version number written in the information table is found updated by the comparing subunit, as a packet filter and a section filter, respectively (copy or update new tables from server, col13 lines 50-66).

Zollinger however fails to specifically disclose the specific limitations of a first extracting unit that has a packet filter and a section filter and is operable to extract one or more of tables, and a second extracting unit. Zollinger however discloses the well-known concept of updating tables, which reside on a client (receiving apparatus) device through transmission of update information (information that are multiplexed for transmission to a client). It should be apparent that Zollinger consists of such extracting units and filters in order to efficiently capture database tables for a client device. In a

Art Unit: 2616

similar field of endeavor, Cartwright specifically discloses the use of extracting units and filters in which extracts table of data from a multiplexed stream and filtering means for filtering the stream to filter out identified data such as updated tables (abstract and col2 lines 1-46 and col3 lines 1-15 and col3 lines 44-52). Cartwright further disclose of a packet filterer and a section filter operable to extract tables (packet identifier and table section header, col3 lines 1-14 and col3 lines 17-27 and col3 lines 35-50). It should have thus been obvious to a person skilled in the art to incorporate the concept of extracting units and filtering units as disclosed by Cartwright into the method of changing and updating database tables founded in client devices in order to keep a system up to date and efficiently running.

**Regarding claim 2**, the combination of Zollinger and Cartwright, more specifically Cartwright disclose the digital broadcast receiving apparatus of Claim 1, wherein the pieces of table ID information written in the information table are the packet identifiers and the table identifiers of the tables (col3 lines 1-13 and col3 lines 34-40 and col3 lines 44-50).

**Regarding claim 3**, the combination of Zollinger and Cartwright, more specifically Cartwright disclose the digital broadcast receiving apparatus of Claim 1, wherein extraction conditions at the packet filter and the section filter of the first extracting unit are set by the filter condition setting subunit (extraction block, col2 lines 65-67 and col3 lines 1-13 and col3 lines 42-53), and when the first extracting unit extracts a table, and



Art Unit: 2616

the storing unit stores there in this table having an old table version number attached, the first extracting unit overwrites the table having the old table version number with the extracted table (simply updating/copying the table).

***Allowable Subject Matter***

6. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Jennery et al. (US 20030105847), System And Method For Server Managed Modification Of Operating System Data Stored Within A Network Device.

b) Sonoda et al. (US 6557171), DIGITAL TV BROADCAST SENDING APPARATUS, DIGITAL TV BROADCAST RECEIVING APPARATUS, AND DIGITAL TV BROADCAST SENDING / RECEIVING SYSTEM WHICH FACILITATE PRESELECTION OF TV PROGRAMS, AND COMPUTER READABLE RECORDING MEDIUM STORING A PROGRAM FOR ACHIEVING A FUNCTION OF THE DIGITAL TV BROADCAST RECEIVING APPARATUS

Art Unit: 2616

c) Shimoji et al. (US 2004/0088739), Digital broadcasting system, digital broadcasting apparatus, and a reception apparatus for digital broadcasts

d) Shimoji et al. (US 6353930), Digital broadcasting system, digital broadcasting apparatus, and receiver apparatus for digital broadcasters

e) Shimoji et al. (US 6986159), Method and system for receiving and recording digital broadcast programs

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Ngo whose telephone number is (571) 272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571) 272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

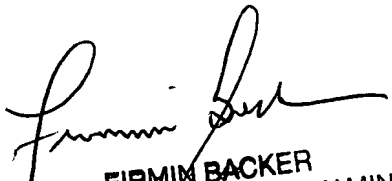
Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

\*\*\*

*NN.*  
**Nguyen Ngo**

United States Patent & Trademark Office  
Patent Examiner AU 2663  
(571) 272-8398

  
**FIRMIN BACKER**  
SUPERVISORY PATENT EXAMINER

Application/Control Number: 10/780,726  
Art Unit: 2616

Page 11